

Computer Science, PhD

Admission Requirements

The admission policies for the Ph.D. program in computer science follow the general policies of the School of Graduate Studies and Computer Science Department as described above. An applicant's admission request will be reviewed in light of preparatory coursework, GRE scores, any supporting information, and general expectation of completing the degree. Students requiring a large amount of prerequisite coursework will not normally be admitted to the program until the courses have been completed. Graduate admission requests for the Ph.D. program will be reviewed once per semester by a departmental admissions committee. Applicants are required to submit supporting recommendation letters and an indication of research interests and study plans. Specific requirements are available from the Computer Science Department office. Requests for admission will be evaluated according to the following guidelines.

Unconditional Admission

Unconditional admission will be given to applicants who meet all of the requirements of the School of Graduate Studies and Computer Science Department. Students showing exceptional promise who desire to pursue the Ph.D. full-time may be admitted to the program after completing a bachelor's degree in Computer Science.

Conditional Admission

Conditional admission will be recommended for applicants who do not meet all of the requirements of the School of Graduate Studies and the Computer Science Department, but show high potential for completing the degree requirements.

Degree Requirements

The general requirements for the Ph.D. degree comply with those of the School of Graduate Studies. The requirements include a preliminary examination, completion of coursework, a Qualifying Examination, completion of significant research documented in a dissertation, and the dissertation defense.

Major/Minor Subjects

A minimum of 54 semester hours of graduate course credit plus a minimum of 18 dissertation semester hours is required for the Ph.D. in Computer Science. The program of study will be approved by the student's Supervisory Committee. Coursework grade requirements are the same as for the M.S. degree. Coursework taken as part of a graduate degree program at another institution may be applied to the degree with permission of the student's Supervisory Committee. At least 9 semester hours of graduate level mathematics must also be included in the program.

The program must include:

Code	Title	Semester Hours
CS 524	PROGRAMMING LANGUAGES	3
CS 603	FORMAL LANG/AUTOMAT THRY	3
CS 613	COMPUTER ARCHITECTURES	3
CS 617	DES & ANALY OF ALGORITHM	3
CS 650	SOFT'W ENGINEERING PROC	3
CS 690	ADVANCED OPERATING SYSTEMS	3
Total Semester Hours		18

It also must have a coherent area of emphasis, of which at least 6 semester hours must be at the 700 level.

Additional Information

Preliminary Examination

Ph.D. students will be required to take a preliminary examination, consisting of:

1. a written test covering fundamental concepts in Computer Science, and
2. an evaluation by the graduate faculty of the student's overall academic potential.

The examination must be taken within a year after admission to the Ph.D. program, or at the earliest opportunity upon completion of the core coursework. Successful completion of the examination will provide evidence of the student's ability to continue in pursuit of the Ph.D. degree. The examination can be taken no more than twice.

Admission to Candidacy

To be admitted to candidacy for the Ph.D. degree, students must first pass the Qualifying Examination. The Qualifying Examination can cover any aspect of the student's program and is taken after completion of the student's coursework and upon recommendation of the student's Supervisory Committee. It is designed to test students' fitness for pursuing research projects in their chosen areas and to test their general knowledge of computer science. As part of the Qualifying Examination, each student will present a research proposal to the Supervisory Committee.

Ph.D. Residency Requirements

According to graduate school policy, residence may be established through either:

1. being enrolled as a full-time student (at least 9 graduate semester hours) either for one continuous academic year, or for Spring and Fall semesters in the same calendar year, or
2. being enrolled in at least 6 semester hours of graduate course work in at least three of four consecutive semesters.

Other Requirements for the Ph.D. Degree

- The program must be completed within five years after admission to candidacy.
- The Qualifying Examination may be taken no more than twice.
- CS 799 is required each semester a student is receiving direction on the doctoral dissertation.

For additional requirements, consult the Academic Information (<http://catalog.uah.edu/grad/academic-info>) Section of this Graduate Catalog.

Dissertation

The research described in the dissertation must be accepted for publication in an approved journal or three conference proceedings prior to defense of the dissertation. A public defense of the dissertation is required.